Case Report Series

THOMMEN Medical

A Fully Digital Workflow for a Full Arch Restoration in Both Jaws With SPI®ELEMENT Implants



Dr. Luca Lavorgna, Italy



The Baseline Situation

Patient with significant esthetic and functional impairments

A female patient with major dentophobia presented at the clinic with significant esthetic and functional impairments. She had lost most dental components and the upper prosthetic restoration showed obvious mobility. The patient's primary request was to conduct the entire surgical treatment in a single step in order to reduce emotional stress.





Guided surgery

Guided insertion of 4 SPI®ELEMENT implants in both the lower and the



The Treatment Strategy





Prototype mock-up and CBCT

Digital planning of the new smile and implant positions

Confirmation of the correctness of the digitally retrieved esthetic and functional diagnosis with a 3D-printed mock-up

Definition of therapeutic details within one appointment













upper jaw followed by bone

augmentation in some areas









Final screw-retained monolithic zirconia restorations

4 months after surgery, final design guided by initial mock-up











Mounting of the prosthetic model according to functional parameters



established with the mock-up



Cross-mounting and design of surgical guide



The Outcome

At the 5-year follow-up, bone volumes were preserved, and the marginal soft tissue appeared stable. The keys to success in this case were a proper prosthetic planning, adherence to the plan by appropriate therapeutic approaches, and the use of an implant system with a conditioned surface and a stable connection.





